

## REMARKS

Claims 1-26 and 81-89 are currently pending. No claims have been amended. Based on the following remarks, the Applicants respectfully request reconsideration of the Application.

### Rejection under 35 U.S.C. §103 in view of *Isfeld*, *Hagsand* and *Chuprun*

The Examiner rejects claims 1-6, 8-10, 12-19, 21-23, 25-26 and 81-89 under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 5,828,835 (*Isfeld*) in view of United States Patent No. 7,254,142 (*Hagsand*) and United States Patent No. 6,115,580 (*Chuprun*). The Applicants respectfully traverse these rejections.

*The cited art does not disclose or suggest each element of claim 1*

Among other limitations, claim 1 recites:

determining a route for a **unidirectional** channel from a source processing node to a destination processing node within the **array of processor nodes**, the determined route based on a physical description of the **array of processor nodes**;  
generating the **unidirectional** channel along the determined route from the source processing node to the destination processing node, the **unidirectional** channel having a bandwidth requirement;

The Examiner correctly states that the combination of *Isfeld* and *Hagsand* does not disclose the steps of “determining a route for a unidirectional channel from a source processing node to a destination processing node within the array of processor nodes” and “generating the unidirectional channel along the determined route from the source processing node to the destination processing node” as recited in claim 1 (*Office Action*, p. 3, para. 5 and continued on p. 4, para. 1)

*Chuprun* does not cure the deficiencies of *Isfeld* and *Hagsand* with respect to the embodiment of claim 1. *Chuprun* discloses a system for identifying an optimal bi-

**directional** path of network nodes for a network connection such as an Internet connection over an outdoor terrain.

In the *Office Action*, the Examiner dismissed the Applicants' arguments, filed November 19, 2009, that *Chuprun* fails to disclose a **unidirectional** channel, but rather discloses technology related to **bi-directional** communication, by stating that *Chuprun* "does not disclose bi-directional transceivers." *Office Action*, 12. The Applicants disagree with the Examiner's interpretation of *Chuprun*. First, the term "transceiver" is known in the art to be a contraction of "transmitter and receiver." A transceiver provides the functionality of both a transmitter and a receiver by definition. By providing both transmitter functions and receiver functions, a transceiver is necessarily, and quintessentially, an element for bi-directional communication. Second, *Chuprun* states that "[e]ach node includes a wireless transceiver unit for use in establishing direct wireless links 32 (such as line-of-sight (LOS) links) with one or more other nodes in the network 10." *Chuprun*, 2:49-52. With the foregoing in mind, *Chuprun* discloses technology related to bi-directional communication, and therefore fails to disclose a unidirectional channel as claimed.

Also regarding claim 1, *Chuprun* does not disclose or suggest "the **array** of processor nodes" as recited twice in the first claim limitation of claim 1 (i.e. the determining step). *Chuprun* merely discloses a network of nodes, operating in a region of interest, wherein nodes are characterized by being mobile. "As nodes move around within a region of interest, the number and magnitude of the obstructions between two nodes can vary significantly." *Chuprun*, 3:27-29. The Applicants contend that the term "array" in the body of claim 1 has patentable weight, and that an array inherently implies order. Hence, a collection of nodes is not the same as an array of nodes.

The Examiner states that claim 1 does not mention "[t]he array of processor nodes is comprised of one or more processors," thereby implying that the Applicants' arguments, filed November 19, 2009, somehow rely on claim 1 including a definition of an array of processor nodes. *Office Action*, 12. It is common knowledge that an "array" of items includes one or more of those items. This is inherent to the definition of array, both to those

of ordinary skill in the art and to the basic definition of “array” in the English language. As such, no such definition for an array of processor nodes which “comprises one or more processors” is required, since the term array is a common term in the art.

**Claims 2-6, 8-10, 12, 13, 81-84, 88, and 89**

Regarding claims 2-6, 8-10, 12, 13, 81-84, 88, and 89, the Applicants contend that these claims are at least patentable because they depend on an otherwise patentable independent claim, and incorporate the elements of claim 1 in addition to the distinguishing limitations they recite. Therefore, claims 2-6, 8-10, 12, 13, 81-84, 88, and 89 are not obvious over the cited reference for at least the same reasons as claim 1 and should also be allowed.

**Claims 14-19, 21-23, 25, 26, and 85-87**

Claim 14 contains elements that distinguish the claimed embodiment from *Isfeld* and *Hagsand*, and *Chuprun* similarly to those discussed above for claim 1. Therefore, claim 14 should be allowed for at least the same reasons as claim 1. Claims 15-19, 21-23, 25-26, and 85-87 depend from claim 14 and incorporate the elements of claim 14 in addition to the patentably distinguishing limitations they recite. Therefore, claims 15-19, 21-23, 25-26, and 85-87 are not obvious over the cited reference for at least the same reasons as claim 14 and should also be allowed.

Rejection under 35 U.S.C. §103 in view of *Isfeld*, *Hagsand*, *Chuprun* and *Plante*

The Examiner rejects claims 7 and 20 under 35 U.S.C. §103(a) as being unpatentable over *Isfeld* in view of *Hagsand* in view of *Chuprun* and further in view of United States Patent Publication No. 2004/0208602 (*Plante*). The Applicants contend that *Plante* fails to alleviate *Chuprun*'s failure to teach a **uni-directional** channel and an **array** of processor nodes. Regarding claims 7 and 20, the Applicants contend that these claims are at least patentable because they depend on otherwise patentable independent claims, in addition to the distinguishing limitations they recite.

Rejection under 35 U.S.C. §103 in view of *Isfeld*, *Hagsand*, *Chuprun* and *Pitts*

The Examiner rejects claims 11 and 24 under 35 U.S.C. §103(a) as being unpatentable over *Isfeld* in view of *Hagsand* in view of *Chuprun* and further in view of United States Patent No. 6,505,241 (*Pitts*). The Applicants contend that *Pitts* fails to alleviate *Chuprun*'s failure to teach a **uni-directional** channel and an **array** of processor nodes. Regarding claims 11 and 24, the Applicants contend that these claims are at least patentable because they depend on otherwise patentable independent claims, in addition to the distinguishing limitations they recite.

### Conclusion

Based on the foregoing remarks, the Applicants request all §103 rejections to the claims be withdrawn, since *Isfeld*, *Hagsand* and *Chuprun* fail to teach a uni-directional channel and an array of processor nodes.

The Applicants contend that the pending claims in the present Application are in condition for allowance. If the Examiner has any questions regarding the Application, the Examiner is invited to contact the Applicants' undersigned representative.

Because the present Response is filed within two months of the mailing date of the *Final Office Action*, the Applicants respectfully request the Examiner issue an Advisory Action in view of the remarks asserted herein.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 06-0600 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

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